THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A shelf-stable confectionery product having a chocolate core and a sugar-based, shell coating, characterised in that the chocolate core is dispersed with gas bubbles having an average diameter of less than 25 microns.

2. A shelf-stable confectionery product according to claim 1, wherein the average diameter of the gas bubbles is about 17 microns.

3. A shelf-stable confectionery product according to claim 1 or 2, wherein the gas bubbles are dispersed substantially homogenously throughout the chocolate core.

4. A shelf-stable confectionery product according to any one of claims 1 to 3, wherein said gas is air.

5. A shelf-stable confectionery product according to any one of claims 1 to 4, wherein the chocolate core comprises about 20-50% by weight cocoa fat, milk powder, sugar powder, liquid fat and flavour.

6. A shelf-stable confectionery product according to any one of claims 1 to 5, wherein the sugar-based coating comprises at least one layer comprising sugar and water, coated with at least one layer comprising sugar, water and colour.

7. A shelf-stable confectionery product according to any one of claims 1 to 6, which is bite-sized.

8. A process for making a shelf-stable confectionery product having a chocolate core and a sugar-based shell coating, characterised in that the process includes the steps (a) to (f), in the specified order:

a) preparing a pasty or liquid chocolate mix from solid chocolate making ingredients and at least one fat;

b) cooling said chocolate mix to form a cooled chocolate mix;

c) transferring said cooled chocolate mix into a mixing chamber;

d) in said mixing chamber, incorporating gas into said chocolate mix and stirring the aerated chocolate mix to form a low density chocolate with micro gas bubbles having an average size no greater than a predetermined value;

e) extruding or otherwise depositing the low density chocolate onto one or more chilled moulding rolls and solidifying said low density chocolate into a desired shape;

f) coating said moulded, low density chocolate with a sugar-based coating to form said shelf-stable confectionery product.

9. A process according to claim 8, wherein said gas is incorporated into said chocolate mix by rapid mixing of said chocolate mix together with said gas.

10. A process according to claim 8 or 9, wherein said rapid mixing is carried out by using a mixing head agitating the liquid chocolate mix.

11. A process according to any one of claims 8 to 10, wherein step (b) comprises cooling the chocolate mix to about 30°C.

12. A process according to any one of claims 8 to 11, wherein the low density chocolate is dispersed with gas bubbles having an average maximum size of less than 25 microns.

13. A process according to claim 12, wherein the average diameter is about 17 microns.

14. A process according to claim 12 or 13, wherein said gas bubbles are dispersed substantially homogeneously.

15. A process according to any one of claims 8 to 14, wherein step (e) includes forming said low density chocolate into a slab of approximate constant thickness.

16. A panned confectionery product comprising a chocolate core and a sugar-based coating, characterised in that the product is produced by the method of any one of claims 8 to 15.

17. A process of manufacturing aerated chocolate, wherein after a chocolate mixture has been formed by mixing solid chocolate making ingredients with at least one fat, the pasty or liquid chocolate mixture is transferred without undergoing a tempering step in a temper-kettle or similar device, into an aeration device with mechanical mixing means, wherein a gas such as air is delivered to the aeration device where it is incorporated into the chocolate mixture, and wherein the chocolate mixture is agitated in the aeration device such as to achieve a predetermined (mean) maximum gas bubble size in the resulting aerated chocolate mixture prior to it being discharged from the aeration device for further processing.

18. The process of claim 17, wherein the chocolate mixture is agitated in the aeration device for such time that it is discharged therefrom with said maximum gas bubble size being about 25 microns, preferably 17 microns.

19. The process of claim 17 or 18, wherein the pasty or liquid chocolate mixture is cooled to a temperature of about 29°C-31°C, preferably at around 30°C before being delivered into the aeration device.

20. The process of claim 17, 18 or 19, wherein the aerated chocolate mixture is maintained within the aeration device at a temperature of about 30°C.